

REMARKS

Applicants are amending the claims of the above-identified application, prior to further examination thereof, by adding new claims 56-73 to the application. These new claims have been added particularly in view of contentions by the Examiner in the Advisory Action mailed November 2, 2004, in the above-identified application.

Specifically, of the newly added claims, claims 56, 62 and 68 are independent claims, all directed to a polishing method. Claim 56 recites that this method includes preparing first and second constituent elements, and at least one diluent, of a metal-polishing liquid, the first and second constituent elements being further defined as including, inter alia, ingredients of an ingredient group; after the preparing, mixing the constituent elements and the at least one diluent, and applying metal-polishing liquid material, forming the metal-polishing liquid, to a polishing pad set on a platen; and after the mixing, polishing the surface of an article to be polished with the polishing pad containing the metal-polishing liquid. In connection with claim 56, note previously considered claims 25 and 26.

Independent claim 62 recites that the method includes providing a metal-polishing liquid in a divided state, which includes first and second constituent elements and at least one diluent, which are not mixed, the first and second constituent elements being further defined as containing ingredients of a specified ingredient group; mixing the first and second constituent elements, and the at least one diluent, to prepare the metal-polishing liquid, and applying metal-polishing liquid material, forming the metal-polishing liquid, to a polishing pad set on a platen; and, after the mixing, polishing the surface of an article to be polished with the polishing

pad containing the metal-polishing liquid. In connection with claim 62, note claims 25 and 26.

Independent claim 68 defines a polishing method, including diluting a metal-polishing liquid material comprising at least one ingredient of a specified ingredient group with an aqueous solution for dilution of at least one ingredient of this ingredient group, thereby preparing a metal-polishing liquid, a polishing pad being provided with this metal-polishing liquid; and polishing the surface of an article to be polished with the polishing pad provided with this metal-polishing liquid. In connection with claim 68, note, for example, original claim 18, as well as claim 25.

All of the remaining claims being added are dependent claims. Claims 57, 63 and 69, dependent respectively on claims 56, 62 and 68, recite that the mixing or diluting is performed at a location outside a polishing device having the polishing pad; claims 58, 64 and 70, dependent respectively on claims 56, 62 and 68, recite that the mixing or diluting is performed in a polishing device having the polishing pad; claims 59, 65 and 71, dependent respectively on claims 56, 62 and 68, recite that the mixing or diluting is performed in a supply tube for supplying the metal-polishing liquid to the polishing pad; and claims 60, 66 and 72, dependent respectively on claims 56, 62 and 68, recite that the mixing or diluting is performed on the polishing pad. Claims 61, 67 and 73, dependent respectively on claims 56, 62 and 68, recite that each ingredient of the ingredient group is a different ingredient, and further defines specified ones of the ingredient group.

Applicants respectfully submit that the presently submitted claims patentably distinguish over the teachings of the reference applied by the Examiner in rejecting claims in the Final Office Action mailed October 31, 2003, that is, U.S. Patent

No. 5,770,095 to Sasaki, et al., under the provisions of 35 USC §102 and 35 USC §103.

In particular, it is respectfully submitted that the applied reference does not disclose, nor would have suggested, such polishing method as in the present claims, including the recited steps prior to the polishing step, of preparing the constituent elements and at least one diluent, of a metal-polishing liquid, and of the mixing step, with the metal-polishing liquid material, forming the metal-polishing liquid, being applied to a polishing pad (see claim 56); and/or the providing of the metal-polishing liquid, in a divided state, which includes the constituent elements and at least one diluent, which are not mixed, and mixing the constituent elements and the at least one diluent, with metal-polishing liquid material being applied to a polishing pad set on a platen (see claim 62); and/or diluting a metal-polishing liquid material as set forth in claim 68, thereby providing a metal-polishing liquid (see claim 68).

Moreover, it is respectfully submitted that this applied reference would have neither disclosed nor would have suggested the presently claimed method, including where the mixing or diluting takes place, as set forth in claims 57-60, 63-66 and 69-72; and/or specific materials of the first and second constituent elements as in claims 61, 67 and 73.

As described on pages 5-8 of the Request For Reconsideration After Final Rejection filed March 31, 2004, in the above-identified application, through use of the presently claimed method, liquid material comprising components having a high concentration can easily be provided and transported, and a metal-polishing liquid according to the present invention can be readily prepared from this liquid material, at any of various locations, by adding, e.g., at least one diluent, and also by mixing

the various components. The liquid material, having a high concentration, has advantages in that the costs for producing the liquid can be reduced, and capacity of the tanks for storing, transporting and using the liquid in polishing plants can be reduced.

It must be emphasized that, different from conventional polishing agents, a metal-polishing liquid material having a protective film-forming agent, with a high concentration, can be easily and effectively formed; and the metal-polishing liquid of the present invention is readily prepared from the metal-polishing liquid material having a high concentration by diluting the material, and therefore its advantages are that of costs for producing the metal-polishing liquid can be reduced, and the capacity of the tanks for storing, transporting and using the liquid and the liquid material in polishing plants can be reduced. According to the present invention, the dissolution promoter is added, e.g., for essentially increasing the solubility in, e.g., water, of the protective film-forming agent. Accordingly, the material for the metal polishing liquid may have a broader and higher concentration, in accordance with the polishing capabilities of the liquid. Note, for example, page 9, lines 12-23 of Applicants' specification.

Sasaki, et al. has been described on pages 8 and 9 of the Request For Reconsideration filed March 31, 2004. It is respectfully submitted that this reference, which discloses a polishing method including use of a specified polishing agent, would have neither disclosed nor would have suggested such method as in the presently submitted claims, including the preparing or providing of the specified constituent elements, with the diluting and/or mixing as in the present claims, including use of the at least one diluent.

Entry of the present amendments, prior to further examination of the above-identified application; and, subsequent thereto, examination of the above-identified application in due course, are respectfully requested.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Deposit Account No. 01-2135 (Case No. 566.40319X00), and please credit any excess fees to such Deposit Account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

By William I. Solomon
William I. Solomon
Reg. No. 28,565

1300 North Seventeenth Street, Suite 1800
Arlington, Virginia 22209
Telephone: (703) 312-6600
Facsimile: (703) 312-6666
WIS/sjg